TABLE III

COMPARATIVE SUMMARY OF PER CENT DISTRIBUTION OF GENERAL DEPARTMENTAL EXPENSES OF ALL CITIES OVER 30,000 FOR SPECIFIED YEARS 1903–1918

Object of Payment	1918	1917	1915	1913	1911	1909	1907	1905	1903
General Government	10.7	11.5	11.4	11.6	11.8	12.2	11.7	10.0	11.1
Police Department	10.9	11.0	11.3	11.6	12.0	12.6	12.4	13.3	13.6
Fire Department	8.3	8.5	8.8	9.1	9.5	9.8	9.6	10.1	9.8
All other Protection to Person and Property	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9
Conservation of Health	2.6	2.5	2.2	2.0	1.9	1.9	1.8	1.6	1.7
Sanitation or promotion of Cleanliness	7.8	7.6	7.9	8.1	8.2	8.1	8.1	8.1	7.5
Highways	10.1	10.4	11.2	11.2	11.6	10.6	12.0	12.0	12.4
Charities, Hospitals, and Corrections	7.4	7.2	6.8	6.4	6.6	6.9	6.6	6.3	6.5
Schools	31.4	31.1	30.2	28.9	28.6	28.2	27.7	28.7	29.3
Libraries	1.3	1.3	1.3	1.3	1.3	1.5	1.3	1.4	1.5
Recreations	3.5	3.5	3.7	3.7	3.7	3.5	3.2	3.4	2.7
Pensions and Gratuities	2.2	2.2	1.9	1.7	1.6	1.5	1.4	1.2	1.1
All Other	1.9	1.3	1.4	2.5	1.4	1.3	2.2	2.0	1.0

of the total appropriations will indicate that our policy in these expenditures has been consistently worked out over a period of years, and hence offers little possibility for downward revision, so far as service rendered is concerned.

When measured in terms of services, we shall not expect less from our city and state governments.

Can we get these services at lower costs? We can in certain ways. Some savings can be made in lost motion by further centralizing bureau organization in the national government. But these savings cannot offset increased costs over a pre-war base. We will see what Mr. Dawes can do.

The dark continent of American administration is in the organization of our state governments. In most of our states we have not one governor but several score of them. Much real progress has been made in the last twenty years in putting city administration on a well organized basis.

Constructive public expenditures that return services for money received do not impair business.

Changing the Fundamental Structure of the Federal Reserve System

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THE delight which statesmen, politicians and economists find in experimenting with the money systems of the world is the root of a large proportion of business evils. Whether it is because the use of money plays so large a part in American life, or whatever the cause, the monetary system of the United States has been the victim of almost ceaseless experimentation. This tinkering has not come to an end with the erection of the Federal

Reserve System, although that is the most comprehensive and definite banking system the nation ever has enjoyed.

Since the approval of the Federal Reserve Act on December 23, 1913, many amendments have been enacted, but for the most part they have been like the amendments to the American Constitution, supplemental and interpretive rather than contradictory and subversive of the original provisions. That this has been the case has not been by unanimous consent. From the very beginnings of the System, efforts have been made to alter in fundamental particulars the theory and method of operation of the Federal Reserve Banks.

THE FEDERAL RESERVE ACT IS NOT AND CANNOT BE FOOL PROOF

The history of monetary and banking legislation in the United States has been a political rather than a scientific chronicle. The tenets and aspirations of parties and politicians have been wrapped up in most of the banking law. The advent of the Federal Reserve System was heralded as a turning point in this policy. Here, said its proponents, was a purely scientific system from which all political color was banished and forever would be. Here was a banking system set apart from the fevers of partisanship which would operate automatically in response to the needs of commerce and on a purely impersonal basis.

Two distinct revelations may be experienced from an examination of the history of the System to date: first, that the one great weakness of the system is its susceptibility to political interference and control whenever the officials in charge of its operation are amenable to ulterior influence and, second, the amazement and dismay of groups of the people at finding that, in the absence of influenced officials, the System proceeds scientifically and impartially.

The discovery by students and statesmen of these two qualities possessed by the American banking system has resulted in the making of determined efforts to amend the organic act for the purpose, on the one hand, of removing all susceptibility to the human element, and, on the other, for the purpose of rendering the System a convenience.

So long as men are required to conduct the banking system the susceptibility to political influence never can be removed, although it may be diminished, and this constitutes the abiding weak spot of the Federal Reserve System. So long as a sufficient number of interested bankers, business men and citizens are vigilant, amendment of the Federal Reserve Act for the purpose of prostituting its facilities to favored groups can be forestalled.

Controversy over the operation of the System and efforts to alter its manner of doing a banking business have been especially numerous during the last year. This activity has been prompted by the effect upon groups of the population of economic forces springing from the turn in the price scale.

The Federal Reserve Act was heralded by its framers and supporters as a measure for the regulation of credit. Because of the extraordinary sequence of events following immediately upon the organization of the System—indeed anticipating the opening of the Federal Reserve Banks—the regulatory provisions of the act had no opportunity to prove their efficacy. The European War burst upon the world with all its concomitant overturning of business. All the elements of commerce and credit which the act was designed to regulate had but one trend.

The entire business of the nation moved steadily along toward an unprecedented expansion. With the price scale rising from day to day, business practically was insured against failure. There never had been any doubt about the ability of the Federal Reserve System to accommodate itself to expansion; the question was whether it could contract.

CREDIT CONTRACTION—THE FIRST REAL TEST FOR THE FEDERAL RESERVE SYSTEM

No opportunity to test this came until the Armistice and then but a limited one. In the brief recession of business following the Armistice, the first test of the ease with which the emergency currency of the System could contract was experienced. Conspicuous success attended the event. For nearly three months the volume of Federal Reserve notes outstanding declined steadily and without friction. The ability of the new currency to contract in harmony with the orderly, easy and natural instance of business requirements was proved.

The spring of 1919 saw a resumption, greater than during the war, of the credit expansion. The Federal Reserve Board, out of deference to the problems of the Treasury in floating public loans, refrained from applying the untried machinery of the System for the curtailment of credit. Discount rates remained abnormally low in order that bond rates should not be bid up.

This could not last, and in December of 1919 the Federal Reserve Board abandoned the shadow of the Treasury and proceeded to put to the test the credit regulating powers of the act. The System had been in operation for nearly six years without this—its most important function—being demonstrated. Now came a trial of whether the Federal Reserve System was, in fact, an efficient machine for the regulation of credit or merely a facility for issuing currency.

By approving successive increases in the discount rate at Federal Reserve Banks, the Federal Reserve Board brought to a halt the credit expansion, hastened the inevitable decline of commodity prices, put a stop to much profiteering and started the readjustment toward pre-war normal so much desired by all save those who had high-inventoried goods to sell.

WHAT THE SYSTEM HAS PROVED IT CAN DO

The second milestone in the testing of the Act had been passed. It now had proved it could contract the currency and could curtail credit expansion. During these years it had further proved the mercurial properties of its reserves, interbank rediscounting having been carried on with amazing success, placing the banking resources of the country at strategic points with the swiftness and precision of pieces on a chess board. It had proved the possibility—long doubted—of solidifying the banking community into a coherent and dirigible agency which could be directed in such a manner as to bring the greatest amount of efficiency to bear at a desired point. It had introduced and well advanced the bank check as a convenient medium of tender, free from vexatious and circumscribing exchange charges. It had perfected a nation-wide clearing system by which balances flowed from one end of the country to the other at the bidding of commercial pressure almost instantaneously.

Nor were these experimental years free from isolated opportunities of the System to prove its ability to forestall bank failures and arise to acute special emergencies.

FUNDAMENTALS OF THE SYSTEM SOUND

In these first experimental years, the Federal Reserve Act was tried out in almost every conceivable way and found capable of withstanding the shocks of business. Its fundamentals were observed to be sound. Only here and there had it been necessary to amend the Act and in all these cases amendments merely were supplemental and complementary to basic provisions of the organic act.

The fundamental principles of the Federal Reserve System may be stated as follows:

Liquidity of security as collateral for notes on which Federal Reserve currency is based, involving restriction of banks forming the System to a commercial rather than an investment business;

Mutability of rates of discount at the discretion of the Federal Reserve Banks, with the approval of the Federal Reserve Board;

Purity of motives and efficiency of management on the part of the personnel;

A regional rather than a central plan of organization.

ATTACKS ON THE COMMERCIAL CHARACTER OF THE SYSTEM

The maintenance of the all-important fundamental principle of liquidity has given friends of the Federal Reserve Act more concern, probably, than any other task. During consideration of the bill in the committees of Congress and on the floors of House and Senate, the utmost courage and determination was required to keep it free from the trammels of provisions admitting non-liquid security to the Federal Reserve Banks. Final enactment of the measure, comparatively free of such embarrassments, by no means stopped the onslaughts. Almost unceasingly amendments have been offered and pressed, looking to the opening of the Federal Reserve Bank portfolios to a miscellaneous assortment of unliquid securities. For instance, spirited efforts have been made to declare eligible for rediscount at Federal Reserve Banks commercial paper secured by railroad stocks and bonds, industrial stocks and bonds, municipal and public utility bonds. These securities, no matter how gilt-edged, have consistently been regarded by the Federal Reserve Board and by the Banking and Currency Committees of Congress as investment securities, and, as such, wholly unsuited as collateral for commercial paper. Organized efforts have been made to tear down this opposition to the admission of such paper, but so far they have proved unavailing.

During the war the attack on the sanctity of the liquidity of Federal Reserve security was particularly energetic and, in the opinion of some observers, partially successful. The declaration of war, followed by the laying down of a government financing program of unprecedented proportions, produced a species of hysteria. It was discerned that the banking system would be called upon to stand the utmost strain, the normal investment capacity of the nation being insufficient, without the aid of bank credit, to meet the drafts certain to be drawn upon it. Over the protests of some of the framers of the Federal Reserve Act, an amendment was approved permitting the issuance of Federal Reserve notes against both gold alone, and gold and commercial paper. The Board acquiesced in this amendment, but it was regarded as a war emergency measure, and to it has been attributed a large portion of the excess credit expansion which has occurred.

Similarly, the obligations of the War

Finance Corporation were admitted as eligible security for commercial paper. This latter authorization was scarcely availed of, if at all, and, of course, was without permanent effect, that corporation being of rather ephemeral nature.

When the Federal Reserve Act was in process of enactment, no member of either Committee, or either house of Congress, entertained the remotest anticipation of such a volume of government obligations as the war evoked. It had been half a century since the American people had been surfeited with government bonds. Throughout the lifetime of nearly every legislator who assisted in the framing of the Federal Reserve Act, the government bond had been the apotheosis of acceptable security for any sort of transaction. It was the sacred cow of public and private finance. It was a matter of course that it should be classed as a primary acceptable security at Federal Reserve Banks.

But soon the official printing presses, at the beck of the yawning war chest, began turning out government bonds with appalling speed. The gilt-edged security, which but a few months before had been dealt in only behind glass and brass partitions and discussed in whispers, now was being hawked by peddlers on the streets. Recently I have been told by statesmen who had practically a controlling influence in the framing of the Federal Reserve Act that had they been aware of what a few years would bring forth they coldly would have denied to all government securities any place at all in the portfolios of Federal Reserve Banks—would have barred them completely as collateral for eligible commercial paper.

But during the fever of war, the opposite view was taken. Preferential rates were made at Federal Reserve Banks for paper secured by government obligations. Here was one of the departures from pure scientific banking which the System has had to fight from the beginning.

It will be noted that the Chairman of the Federal Reserve Board and the Secretary of the Treasury are the same man, under the law. It was no more than human that the man charged as Secretary of the Treasury with the duty of raising funds to prosecute the war at the cheapest obtainable rate would use his substantial influence to do all he could to make the bonds he was offering attractive to business men. To place them in a favored status as collateral security for commercial paper at a time when all business men were borrowing heavily to take advantage of boom opportunities was indeed an inducement to their purchase. Here was a cycle which preyed viciously on the liquidity of the Federal Reserve Banks. The Federal Reserve Bank rates—the rates which borrowers must pay—were kept low so that the bond rates could be kept low and save the Treasury money. The bonds were given preferential treatment as collateral security for commercial paper offered at these low interest rates. Everything favored the borrower. Inflation was the inevitable result.

In the last few months, the Federal Reserve Banks have set about a readjustment of this state of affairs and adverse discrimination, instead of preference, is being shown paper secured by government obligations. The differential on government-secured paper first came up to the straight commercial paper rate and then went above it, or rather, the commercial rate came down with no simultaneous reduction in the government-secured differential. Further, the practice of the Federal Reserve Banks in lending par on government bonds, despite the

depreciated market value, has been abandoned and governments now must stand the same market test, in the collateral drawer, with other securities.

And further, during the war the portfolios of the Federal Reserve Banks were thrown open to a miscellaneous assortment of acceptances, the liquidity of which might well be questioned. Acceptances, indeed, were found by a special investigation conducted in the winter of 1919–20 by the Federal Reserve Banks of Boston, New York and Philadelphia to be the instruments used in the financing of exports to Europe. Drawn for relatively short periods, they were being renewed over and over again and were settling down to the lethargic slumber of frozen credits, the European buyers against whom they had been drawn receding farther and farther from possibility of liquidation. Many of them might as well have been drawn on the Man in the Moon. Yet they had been accepted on the American seaboard and, under the law, rediscounted at Federal Reserve Banks.

The Farmers' Raid on the Reserve System

The distress of the producers of farm products, incident to the world-wide recession in prices, has, in the last year, caused a new attack on the fundamental principle of liquidity of the System. The farmers have erected at Washington a lobby which is stronger than ever the organized labor lobby was. Crystallized through the activities of this lobby, much propaganda has gone out blaming the Federal Reserve Board for the decline of prices and for the ruination of the farmer. In the fall of 1920, earnest efforts were made by the farmers to induce the Federal Reserve Banks to distend credits to a compass which would permit the holding off the market of practically the whole harvest. When the Board declined to connive with the farmers in an attempt to forestall what was regarded as an inevitable economic development, they cried treason.

This was the point at which the members of Congress from agricultural states, who had assisted in the framing of the Act, experienced acute dismay, discovering that their creature was indeed functioning as they had boasted it would, without fear or favor, scientifically and bereft of partisan bias. Many affirmed that it was the intention of the framers of the Act to aid the farmers in such crises and an organized effort was made and still is being maintained to rewrite the Act into a breadline charter for needy husbandmen.

There are pending before the Banking and Currency Committees of both houses of Congress, bills proposing to define as eligible for rediscount at Federal Reserve Banks the paper of cotton factors, of wheat commission merchants and of others who would use the resources of the System for holding crops off the market for higher prices. Other measures, having this same background of rural relief, would admit such securities as irrigation and development bonds to the list of acceptable collateral. It is unlikely that the eastern influence in Congress will permit these attacks on the principal fundamental of the Federal Reserve System to succeed.

The Outcry Against Regulatory Discount Rates

The second fundamental of the system is given as the mutability of rates of discount at the discretion of the Federal Reserve Banks, with the Board's approval. It has been seen how the System utilized this element to control the credit expansion during the last eighteen months, and with

what conspicuous success. Through the pressure of rates, alterable at discretion, the System squeezed a billion dollars of speculative funds out of the stock market in less than a year, diverting it to productive uses in the agricultural and manufacturing regions. Turning upon another point, the System squeezed another tremendous sum out of the speculative branch of the commodity market, diverting the credit again to productive uses. Gamblers, hoarders, profiteers, promoters and all traders classed as not legitimate in times of stress, were in quick succession routed by means of this baton of power—the interest rate answerable at a nod to the occasions of the Federal Reserve System. With all the boards, commissions, committees and investigators which the government had employed throughout the war and post-Armistice period, not a point was gained in the effort to reduce the high cost of living until the Federal Reserve Bank rate was brought into play.

Now it is proposed by some of those who felt the chastening effect of the rate changes, that Congress delimit the rates to be charged. Operating wholly at the dictates of and, indeed, constituting a part of, the law of supply and demand, it is sought to strike at this fundamental by removing discretion as to its use and making it static.

Part of the agitation for this change has arisen from reports of large earnings by the Federal Reserve Banks, wrested, it has been declaimed, from the pockets of poor farmers. In the first place, earnings above six per cent are covered into the Treasury of the United States and become public funds; but of more importance, is the obvious fact that in times of brisk demand for accommodation, relaxing of collateral restrictions and lowering of interest rates would increase rather than diminish the total earnings of the Reserve Banks because of the vastly greater volume of business which would be thrust upon them. Furthermore, there is the important consideration that such a course probably would break the banks.

THE DIFFICULTY OF KEEPING POLITICS OUT OF THE SYSTEM

The Federal Reserve Banks themselves, contrary to a popular notion, are not owned by the government. Not a cent of Treasury capital is in them. They are private institutions under government control, dedicated to public use and employed as federal fiscal agents. The Federal Reserve Board, however, is appointed by the President, the Senate concurring. This introduces the political element.

Here is an opening for the entrance of politics and the experience of the System has been that a constant fight has been necessary to keep the third great fundamental of the System, purity of motives and efficiency of management on the part of appointed officials, secure. The Board has been peculiarly fortunate so far in keeping aloof from politics, despite efforts on every hand to inject that element into banking control.

With the agitation for the relaxation of collateral restrictions and the fixation of interest rates, also has come a movement to give a political color to the Board. Bills are pending in Congress, supported by the agricultural interests, to effect this. They provide that the Secretary of Agriculture and the Secretary of Commerce—both necessarily political appointees—shall be ex officio members of the Federal Reserve Board.

The Board, as originally constituted, has two ex officio members, the Secretary of the Treasury and the Comptroller of the Currency. These are two too many, for the reasons that

both are political appointees and both sit on the Board in addition to performing other duties. It is the belief of the Board that its members from time to time should visit Federal Reserve Banks and keep in personal touch with the country generally, yet with the ex officio members too busily engaged to attend meetings of the Board frequently, the regular members must remain almost constantly at Washington to preserve a quorum.

Importance of the Regional Structure

A fourth fundamental of the Federal Reserve System is the regional organization constituted by its twelve Federal Reserve Banks, which have numerous branches. Supporters of a single central bank always are prepared to urge this change when an opportunity presents. The experience of the System is that the regional principle is sound. The conclusion is reached from close study of the operation of the System since its inception, that a single bank could not stand. It will be recalled that President Wilson, in advocating the regional system, pointed out that distribution of the banks would "fructify the lean regions." It has had this effect and the western Federal Reserve Banks are making progress in bringing assistance to the vastly undercapitalized Western States by furnishing a convenient and ready channel for the introduction of eastern capital. But of equal importance is the consideration that the regional banks draw from the lean regions as well as others, a tangible support in return for the assistance given.

The Federal Reserve System is an empire whose constituent parts rally to the general defense when any arm is attacked. Did the United States have a central bank now, it is almost certain that enough enmity could be organized against what would appear as an ogreish concentrated money power to overturn it. But with the twelve banks scattered throughout the country, the element of local pride enters in and the realization of mutual benefit is felt. The Federal Reserve Bank is not a remote, alien and sinister influence in a distant and envied section of the nation. It stands just across the street. The New York or the Dallas Federal Reserve Bank may be attacked by some passing clamor, but the Banks at St. Louis and Cleveland are not going to permit the whole system to collapse because of the disturbance. Yet a single, central bank might very likely succumb.

This is being realized more and more, and it is not at all likely that this fundamental of the System will be changed.

Attempts to Overload the System

Another manner in which the System is sought to be preyed upon is the burdening of the Federal Reserve System with extraneous duties. While these do not strike at the integrity of any single fundamental of the System, to carry their development too far would impair the entire structure through overloading. For instance, there is now pending legislation providing that the surplus earnings of the Federal Reserve Banks shall be placed in a special fund to be lent on cattle paper, on crops held in storage and for similar purposes of a financial rather than of a commercial nature. It also has been proposed that the Federal Reserve System create a foreign bank which shall have a species of monopoly of foreign exchange dealings. Other tasks have been proposed and urged for the Federal Reserve Banks which are indeed closely allied to banking, but which might, if permitted to develop unbridled, confuse and overload the System.

There is the unceasing effort to main-

tain by legislation the integrity and special privileges of State banks after they enter the System—a sort of marriage vow with a reservation. It would appear to be the part of wisdom to add as few restrictions and new duties as possible to a system which already is of towering proportions, to the end that it may function smoothly, unencumbered and unembarrassed.

TWO NEEDED IMPROVEMENTS

The closest observers of the operation of the System have but few suggestions to make for changes in the fundamentals. For the most part, they are content with the Act as it stands. But there are two particulars in which it is felt that strength and efficiency could be added:

First, remove government bonds as eligible collateral for commercial paper acceptable for rediscount at Federal Reserve Banks, and thereby destroy a wide avenue for rapid inflation.

Second, reorganize the Federal Reserve Board so as to divorce it from other government activities and relieve it of the embarrassment of ex officio membership.

Economic Factors in the Location of Manufacturing Industries

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TO overcome restrictions limiting enterprises to special localities has been one of the unconscious purposes behind industrial progress. A study of the factors that hitherto have bound particular industries to favored places shows that technical or social advances have loosened the grip of such factors. These advances foreshadow greater freedom of choice in the location of future manufacturing projects. The bonds that have hobbled manufacturing business are raw materials, labor, market, power or fuel, capital and transportation. Not all of these have restricted all industries, nor are the undertakings actually affected under equal subservience to each factor, but taken together the considerations mentioned constitute the principal dominants in factory location. Yet with the exception of the market and transportation, each shows a waning power over the placement of a factory.

THE PART PLAYED BY RAW MATERIALS IN FACTORY LOCATION

Raw materials have not dictated factory location to the extent that they necessarily determine mining—where there is no coal there are no tipples, and concentrators are useless where copper ore does not exist—for even the first factories both in Manchester, England, and Pawtucket, R. I., were leagues distant from the cotton fields of the West Indies, the Carolinas and Georgia. Nevertheless, bulky, cheap, fragile or perishable raw materials have usually limited factories using them to the neighborhood where the materials exist. In fact, in the case of bulky cotton cited above, the works that today are remote from our South specialize on cloth that has more value in skilled labor than in raw material while heavy cheap stuffs whose chief value lies in the contained cotton are made where cotton grows.